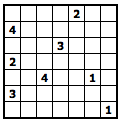
**Problem of the Week #6 Q3**

Due 2/10/11 by 3:15 PM

Turn in to the Math Office or email to 13mmistele@ransomeverglades.org.

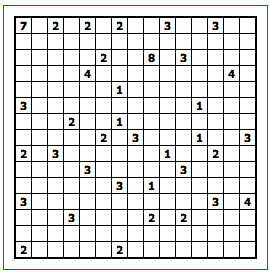
**Nurikabe (or, “Islands in the Stream”) Puzzle CHALLENGE!**

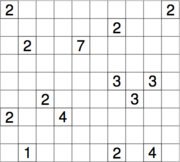
**Regular Puzzles (1 ticket combined)**

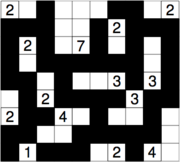


**The Rules**

**Challenge Puzzle (+1 ticket)**



The puzzle is played on a rectangular grid of cells, some of which contain numbers. Cells are initially of unknown color, but they can only be black or white. Two same-color cells are considered "connected" if they are adjacent vertically or horizontally, but not diagonally. Connected white cells form "islands", while connected black cells form a “stream".



The challenge is to paint each cell black or white, subject to the following rules:

1. Each numbered cell is an island cell, and the number in it is the number of cells in that island.
2. Each island must contain exactly one numbered cell.
3. No "pools" are allowed, i.e. 2x2 areas of black cells.
4. The completed puzzle must have only one connected stream.

Solvers will typically dot the non-numbered cells they've determined to be certain to belong to an island while trying to solve the puzzle. Guessing is almost never required to solve the puzzle.

(Adapted from Wikipedia)